

REMARKS

Introductory Comments:

Claims 1-16, and 20-24 are pending in the application. Claims 17-20 were previously cancelled. Claims 4 and 12 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicants regard as his invention. Claims 1-4, 9-12, 15-16, 20, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Huben et al. (5,878,408) (hereinafter "van Huben") in view of Claudio Zizzo (6,578,174) (hereinafter "Zizzo"). Claims 7-8, 21-22 are rejected under 35 USC 103(a) as being unpatentable over van Huben in view of Zizzo in further view of US 2002/0041287 by Peter G. Engeldrum et al. (hereinafter "Engeldrum"). Claims 5-6 and 13-14 are rejected under 35 USC 103(a) as being unpatentable over van Huben et al. in view of Zizzo in further view of U.S. Patent No. 6,665,854 by Fujiwara et al. (hereinafter "Fujiwara"). The Applicants respectfully request reconsideration of Claims 1-16 and 20-24.

In Response to the 35 USC 112 Claim Rejections:

Claims 4 and 12 are rejected because the Office Action found use of a trademark in those claims. The Applicants respond by amending these claims to eliminate the use of the trademark "Java" and to use instead its generic counterpart "applets". No new matter has been added. The Applicants therefore believe these rejections overcome.

In Response to the 35 USC 103(a) Claim Rejections:

As mentioned, Claims 1-4, 9-12, 15-16, 20, and 23-24 are rejected as being unpatentable over van Huben in view of Zizzo. According to the Office Action, van Huben teaches development of shared virtual environments based on VRML and a server. Also, according to the Office Action, van Huben teaches a control system suitable for use with the design of integrated circuits having many parts developed with multiple user inputs, which may be located anywhere in the world. Van Huben also allegedly includes that the inputs provide a set of control information for coordinating movement of design information. However, the Office Action states and Applicants agree that "van Huben does not teach the 'external database'." According to the Office Action, Zizzo teaches the external database in an analogous prior art. Also, according to the Office Action, Zizzo teaches the IP "Intellectual Properties" core placement step may be accomplished by making table entries indicating the appropriate

position coordinates, and the design platform may incorporate a graphical user interface to allow a user to ability to place and move IP cores within a SoC design. This, the Office Action concludes, includes a reference designator, an X and Y location, rotation information, and package type for each of a plurality of components.

Applicants believe Claims 1, 9, and 23 are new and non-obvious because the *claims and the prior art differ. Claims 1, 9, and 23 include that the external database includes a reference designator, an XY location, rotation information, and package type for each of a plurality of components. These items are highly tailored to a specific circuit board rather than, as in the prior art, having information drawn from less specific programs. These specific elements of a specific board design allow identification of a circuit board such that data may be verified and specific parts may be identified on the board and references may be immediately checked from the board.*

In contrast, van Huben merely includes a repository implemented in the form of a database (relational, object oriented, etc.) or alternately including a flat-file system for coordinating movement of design information. And, Zizzo is a method and system for chip design using remotely located resources. Nowhere in van Huben and Zizzo is there mention of, either directly or inferentially, a reference designator, an XY location, rotation information, and package type for each of a plurality of components. Instead, van Huben includes model creation and, thereafter, continuous tracking of the created model while allowing a user to modify it by adding components, deleting components, changing the status or deleting the created model, and allowing promotion of a model in their data processing system through the *libraries of their data processing system (Summary Of The Invention)*, while Zizzo includes a multi-faceted circuit design platform facilitates the design of circuits and chips by making it easier for designers to locate and incorporate available virtual component blocks into new designs by providing designers with the necessary support data on the virtual component blocks and allows designers to perform integration and connectivity verification as well as basic functional verification (Summary Of The Invention).

The mentioned relational and object oriented characteristics of van Huben and Zizzo are not equivalent to a disclosure or description of a reference designator, an XY location, rotation information, and package type for each of a plurality of components, such that during manufacturing an image of the board including the aforementioned files may be viewed easily by a user for facilitating circuit board engineering. Instead, they are merely a means for *grouping disparate data items. Therefore, because van Huben and Zizzo do not include all the elements of Claims 1, 9, and 23, these claims are believed to be allowable.*

Claims 2-4, 10-12, 15-16, 20, and 24 depend from Claims 1, 9, and 23 and are believed to be allowable for at least the aforementioned reason.

In Response to the other 35 USC 103 Claim Rejections:

Claims 7-8, 21-22 are rejected as being unpatentable over van Huben in view of Zizzo in further view of Engeldrum, and Claims 5-6, 9-15, and 20 under 35 USC 103(a) as being unpatentable over van Huben in view of Zizzo in further view of Fujiwara. As discussed above, these claims are believed to be allowable for at least the reasons discussed regarding claims 1, 9, and 23.

Conclusions:

In view of the aforementioned remarks, it is respectfully submitted that all pending claims are in a condition for allowance. A notice of allowability is *therefore respectfully* solicited. Please charge any fees required in the filing of this amendment to Deposit Account 50-0476.

Respectfully submitted,

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